

**DETAILED ACTION**

***Response to Amendment***

1. The amendment and written response filed 02/02/2009 has been entered and considered.
2. Claims 1, 10 and 19-26 have been amended.
3. Claims 1-26 are pending.

***Response to Arguments***

4. Upon entry of the amendment, the object of claims 1 and 10 has been withdrawn.
5. Upon entry of the amendment, the rejection of claims 19-26 has been withdrawn.

***Allowable Subject Matter***

6. Claims 1-26 are allowed.

The following is an examiner's statement of reasons for allowance:

- a. Claims 1-18 are allowed as indicated in the previous office action dated 10/31/2008.
- b. Independent claim 19 defines features of calculating a relative weight factor for each transcript by taking the inverse of the square root of the sum of the probe weight for each PM probe; wherein a higher relative weight factor value corresponds to a lower quality microarray. These features in combination with other features in claim 19 are not taught or suggested by the art of record.
- c. Claim 20 is dependent upon claim 19.
- d. Independent claim 21 defines a features of calculating a quality metric according

to the relationship:  $\bar{w} = \frac{1}{\sqrt{\sum_{j=1}^J w_j}}$ , where  $w_j$  is the weight of the  $j^{th}$  PM probe.

This feature in combination with other features in claim 21 is not taught or suggested by the art of record.

- e. Claim 22 is dependent upon claim 21.
- f. Independent claim 23 defines a features of calculating a quality metric according to the relationship:  $\sum_j \sum_k w_{jk}^{-x}, \forall j, k,$ , where  $w_{jk}$  is the weight of the  $j^{th}$  PM probe of transcript k and  $x = 1$  or  $2$ . This feature is not taught or suggested by the art of record.
- g. Claim 24 is dependent upon claim 23.
- h. Independent claim 25 defines a feature of calculating a quality metric according to the relationship:  $\sum_j \sum_k (1 - w_{jk}), \forall j, k,$ , where  $w_{jk}$  is the weight of the  $j^{th}$  PM probe of transcript. This feature is not taught or suggested by the art of record.
- i. Claim 26 is dependent upon claim 25.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Y. Lu whose telephone number is (571)272-7393. The examiner can normally be reached on 9AM -5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Werner can be reached on 571-272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tom Y Lu/  
Primary Examiner, Art Unit 2624